



SEQUENCE LISTING

<110> Mitchell, Lloyd
Puttaraju, Madaiah
Dallinger, Guenter
Klausegger, Alfred
Bauer, Johann

<120> SPLICEOSOME-MEDIATED RNA TRANS-SPLICING
FOR CORRECTION OF SKIN DISORDERS

<130> A35306-A 069906.0161

<140> 10/621,867

<141> 2003-07-17

<150> 10/198,447

<151> 2002-07-17

<160> 38

<170> FastSEQ for Windows Version 4.0

<210> 1

<211> 8

<212> RNA

<213> Artificial Sequence

<220>

<223> 5' splice site consensus sequence

<400> 1

agguragu

8

<210> 2

<211> 7

<212> RNA

<213> Artificial Sequence

<220>

<221> unsure

<222> 2

<223> A, C, G or U

<223> branch point consensus sequence

<400> 2

ynyurac

7

<210> 3

<211> 258

<212> DNA

<213> Artificial Sequence

<220>

<223> 5' fragment sequence of mini-intron

<400> 3

gtagttcttt tgttcttcac tattaagaac ttaatttggt gtccatgtct cttttttttt 60

ctagtttgta gtgctggaag gtatTTTTTgg agaaattctt acatgagcat taggagaatg 120
 tatgggtgta gtgtcttgta taatagaaat tgttccactg ataatttact ctagtttttt 180
 atttcctcat attattttca gtggcttttt cttccacatc tttatatatt gcaccacatt 240
 caacactgta gcggccgc 258

<210> 4
 <211> 269
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> 3 fragment sequence of mini-intron

<400> 4
 caactatctg aatcatgtgc cccttctctg tgaacctcta tcataatact tgtcacactg 60
 tattgtaatt gtctctttta ctttcccttg tatcttttgt gcatagcaga gtacctgaaa 120
 caggaagtat tttaaatatt ttgaatcaaa tgagttaata gaatctttac aaataagaat 180
 atacacttct gcttaggatg ataattggag gcaagtgaat cctgagcgtg atttgataat 240
 gacctaataa tgatggggtt tatttccag 269

<210> 5
 <211> 18
 <212> RNA
 <213> Artificial Sequence

<220>
 <223> ISAR consensus sequence

<400> 5
 gggcugauuu uuccaugu 18

<210> 6
 <211> 23
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Oligonucleotide primer

<400> 6
 taatacgact cactataggg aga 23

<210> 7
 <211> 23
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Oligonucleotide primer

<221> unsure
 <222> 22
 <223> A, C, G or T

<400> 7
 atttagtga cactatagaa gng 23

<210> 8
 <211> 23
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Oligonucleotide primer

 <400> 8
 aattaaccct cactaaaggg aga 23

 <210> 9
 <211> 29
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Oligonucleotide primer

 <400> 9
 cgggatccgt aggtgccccg acggtgatg 29

 <210> 10
 <211> 32
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Oligonucleotide primer

 <400> 10
 ctagggtaac cagggtgaga agctgcatga gt 32

 <210> 11
 <211> 31
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Oligonucleotide primer

 <400> 11
 ctaggctagc ctgccggctt gtcattcatc c 31

 <210> 12
 <211> 57
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Oligonucleotide primer

 <400> 12
 ctagaagctt ttacttgtca tcgtcgtcct tgtagtcgct gcatgctctc tgacacc 57

 <210> 13
 <211> 52
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Oligonucleotide primer

 <400> 13
 ctagggtacc tcttcttttt tttgatatcc tgcaggctcct gatgtgcgca gc 52

| | |
|-------------------------------------|----|
| <210> 14 | |
| <211> 32 | |
| <212> DNA | |
| <213> Artificial Sequence | |
| <220> | |
| <223> Oligonucleotide primer | |
| <400> 14 | |
| ctagaagctt ttatggagac cttggaccta ag | 32 |
| <210> 15 | |
| <211> 21 | |
| <212> DNA | |
| <213> Artificial Sequence | |
| <220> | |
| <223> Oligonucleotide primer | |
| <400> 15 | |
| atcaaactctg tcgataccttc c | 21 |
| <210> 16 | |
| <211> 23 | |
| <212> DNA | |
| <213> Artificial Sequence | |
| <220> | |
| <223> Oligonucleotide primer | |
| <400> 16 | |
| gactgatcca cccagtcca tta | 23 |
| <210> 17 | |
| <211> 23 | |
| <212> DNA | |
| <213> Artificial Sequence | |
| <220> | |
| <223> Oligonucleotide primer | |
| <400> 17 | |
| gactgatcca cccagtcca gac | 23 |
| <210> 18 | |
| <211> 20 | |
| <212> DNA | |
| <213> Artificial Sequence | |
| <220> | |
| <223> Oligonucleotide primer | |
| <400> 18 | |
| catcccaggc cctccaggac | 20 |
| <210> 19 | |
| <211> 21 | |
| <212> DNA | |
| <213> Artificial Sequence | |

| | |
|------------------------------|----|
| <220> | |
| <223> Oligonucleotide primer | |
| <400> 19 | |
| ttgtcatcgt cgtccttgta g | 21 |
| <210> 20 | |
| <211> 18 | |
| <212> DNA | |
| <213> Artificial Sequence | |
| <220> | |
| <223> Oligonucleotide primer | |
| <400> 20 | |
| gtaggccatc ccttgca | 18 |
| <210> 21 | |
| <211> 24 | |
| <212> DNA | |
| <213> Artificial Sequence | |
| <220> | |
| <223> Oligonucleotide primer | |
| <400> 21 | |
| gggagctggg gctgctgctg cttc | 24 |
| <210> 22 | |
| <211> 24 | |
| <212> DNA | |
| <213> Artificial Sequence | |
| <220> | |
| <223> Oligonucleotide primer | |
| <400> 22 | |
| gggagctggg gctgctgctg ctgc | 24 |
| <210> 23 | |
| <211> 24 | |
| <212> DNA | |
| <213> Artificial Sequence | |
| <220> | |
| <223> Oligonucleotide primer | |
| <400> 23 | |
| ctctcaaact cgctgcggag ctgc | 24 |
| <210> 24 | |
| <211> 7 | |
| <212> DNA | |
| <213> Artificial Sequence | |
| <220> | |
| <223> PTM branch point | |
| <400> 24 | |
| tactaac | 7 |

<210> 25
 <211> 21
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> PTM polypyrimidine tract

 <400> 25
 ctcttctttt tttttctgca g 21

 <210> 26
 <211> 32
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Binding domain of pColl17PTM1

 <400> 26
 ggagttaggg agtctctccc aggggtgtcaa tg 32

 <210> 27
 <211> 27
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Binding domain of pColl17PTM3

 <400> 27
 gggggagaag ctgctgcatg agggagc 27

 <210> 28
 <211> 52
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Binding domain of pColl17PTM5

 <400> 28
 aagctgcctg agtgggagct aagatctcgg ttgagataaa gacttgggag tt 52

 <210> 29
 <211> 30
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> cis-spliced product

 <400> 29
 gtttacaggg cggcttcgtg taataatggg 30

 <210> 30
 <211> 24
 <212> DNA
 <213> Artificial Sequence

 <220>

<223> trans-spliced product

<400> 30

gtttacaggg cgccttcgtc tggg

24

<210> 31

<211> 30

<212> DNA

<213> Artificial Sequence

<220>

<223> trans-spliced product

<400> 31

tcagctacct cacaaggcgg cttcgtctgg

30

<210> 32

<211> 17

<212> DNA

<213> Artificial Sequence

<220>

<221> unsure

<222> (12)....(17)

<223> A, C, G or T

<223> trans-spliced product

<400> 32

acacagctca tntnnnn

17

<210> 33

<211> 7

<212> DNA

<213> Artificial Sequence

<220>

<223> trans-spliced wild type product

<400> 33

tctgtca

7

<210> 34

<211> 7

<212> DNA

<213> Artificial Sequence

<220>

<223> trans-spliced mutant product

<400> 34

tgtcagg

7

<210> 35

<211> 19

<212> DNA

<213> Artificial Sequence

<220>

<223> trans-spliced product

<400> 35
acacagctca tctgtcagg 19

<210> 36
<211> 9
<212> DNA
<213> Artificial Sequence

<220>
<223> trans-spliced wild type product

<400> 36
tctgtcagg 9

<210> 37
<211> 17
<212> DNA
<213> Artificial Sequence

<220>
<223> trans-spliced product

<400> 37
acacagctca tgtcagg 17

<210> 38
<211> 7
<212> DNA
<213> Artificial Sequence

<220>
<223> trans-spliced mutant product

<400> 38
tgtcagg 7